

REMARKS/ARGUMENTS

Reconsideration and withdrawal of all outstanding grounds for rejection are respectfully requested in light of the above amendments and the remarks that follow.

At the outset, applicant gratefully acknowledges the Examiner's indication that claims 27-30 contain allowable subject matter. By this Amendment, claim 27 has been rewritten in independent form, thereby placing claims 27-30 in condition for immediate allowance.

The Examiner has rejected claims 1-3 and 15-17 under 35 U.S.C. § 102(b) as anticipated by Edwards. According to the Examiner, the flexible water (micro) tubing or conduit 14 of Edwards provides response for the claim limitation relating to an existing functional element including at least one substantially liquid-tight passage. The Examiner also notes the misting nozzle 12 in operative association with the element 14, and further asserts that the frame members D and E provide response for the hollow canopy frame component limitation.

By this Amendment, claim 1 has been amended to require that the space to be cooled be defined at least in part by existing structural elements having primary functions unrelated to transport of cooling liquid but including at least one substantially rigid, elongated tubular element defining a substantially liquid-tight passage.

The flexible tubing 14 in Edwards cannot under any reasonable circumstances be regarded as having a primary function unrelated to the transport of cooling liquid nor can it be reasonably regarded as a rigid elongated tubular element defining a substantially liquid-tight passage. In fact, the transport of cooling liquid is the sole function of tubing 14.

Dependent claim 2 now requires that the manipulative steps in claim 1 be practiced by using a hollow substantially rigid canopy frame component on a watercraft as the substantially

rigid elongated tubular element. Here again, there is no disclosure or even remote suggestion in Edwards of utilizing a substantially rigid canopy component for carrying a cooling liquid.

Similarly, dependent claim 3 requires that steps a) and b) of claim 1 be practiced using a hollow substantially rigid rail or supporting frame on a watercraft as the substantially rigid elongated tubular element. For the same reasons noted above, Edwards neither discloses nor suggests the claimed arrangement.

Independent claim 15 now requires a misting system that includes a substantially rigid tubular element, a primary function of which is to define at least a portion of the space to be cooled, but which is also adapted to transport liquid to be misted through a substantially water tight passage in the element, directly into the space to be cooled.

Not only is the conduit 14 in Edwards not rigid as required by claim 15, but in addition, the flexible conduit 14 does not functionally define in any way at least a portion of the space to be cooled.

Dependent claim 16 is patentable by reason of its dependence upon claim 15 and dependent claim 17 is patentable in its own right in that Edwards nowhere discloses or suggests that the rigid tubular element comprise the component of a frame for supporting a canopy, a rail, a superstructure frame element or a light fixture.

For all of the above reasons, it is respectfully requested that the Section 102 anticipation rejection of claims 1-3 and 15-17 based on Edwards be withdrawn.

The Examiner has also rejected claims 1, 4, 5, 8 and 15 under 35 U.S.C. § 102(b) as anticipated by Kennedy et al.

In Kennedy, an environmental control system which atomizes filtered and purified or pretreated water is disclosed. A plurality of spaced misting nozzles are mounted in metal or

plastic conduits 17 that are connected to a water supply line 18 and filter 19. The conduits 17, however, have no disclosed function other than that of carrying cooling liquid to the misting nozzles. Stated otherwise, the conduits 17 in Kennedy do not have primary functions unrelated to transport of cooling liquid as required by independent claim 1. Accordingly, claim 1 patentably defines over Kennedy, and dependent claims 4, 5 and 8 are patentable over Kennedy by reason of their dependence upon claim 1.

With respect to independent claim 15, there is nothing in Kennedy to suggest that a primary function of the conduit 17 is to define at least a portion of the spaced to be cooled. Rather, the conduits 17 are simply arranged along whatever other structure defines the space to be cooled. In this regard, see the disclosure in Kennedy in column 5, lines 28 through 39 and column 7, lines 57-62. Accordingly, claim 15 also patentably defines over Kennedy.

The Examiner has also rejected claims 15, 18 and 19 under 35 U.S.C. § 102 as anticipated by Terrell et al. According to the Examiner, the reference shows a misting system for supplying a mist of liquid into a space 14 comprising a substantially water tight passage containing element in a nozzle 30.

In fact, the misting fans 20 in Terrell are mounted on a supporting member 18 of a roof 16 and cooling water is supplied to the misting fans 20 by flexible conduits 32.

Accordingly, Terrell does not disclose or suggest a substantially rigid tubular element, a primary function of which is to define at least a portion of the space to be cooled but which is also adapted to transport liquid to be misted through a substantially water tight passage in the element, as required by amended independent claim 15. Dependent claims 18 and 19 are patentable by reason of their dependence of claim 15.

The Examiner has rejected claims 9-12 and 14 under 35 U.S.C. § 103 as unpatentable over Edwards in view of Kennedy. According to the Examiner, it would have been obvious to one of ordinary skill in the art to have modified the device of Edwards by providing mist droplets having a maximum cross-sectional dimension between about 5-100 microns as taught by Kennedy to produce the required degree of flash evaporation and cooling.

A discussion of Edwards and Kennedy as applied separately to claims 1 and 15 appears above. Independent method claim 9 as amended herewith calls for a method of cooling a space, or humans within a space, on a watercraft in an aesthetically acceptable manner by supplying fresh water through a substantially rigid, elongated structural element of the watercraft to a plurality of nozzles mounted in structural element and directly misting the fresh water into the space through the plurality of nozzles. Neither Edwards nor Kennedy, alone or in combination, suggest the subject matter of independent method claim 9 in that neither reference discloses or suggests supplying fresh water through a substantially rigid elongated structural element of a watercraft. Dependent claim 11 further requires that the structural element comprise one or more hollow substantially rigid and water tight frame elements supporting the water craft canopy. The references, alone or in combination, fail to suggest this arrangement.

With regard to dependent claim 12, the Examiner acknowledges that neither reference suggests the claim limitations and it is clearly erroneous for the Examiner to simply assert obvious matter of choice as a basis for the rejection. In any event, claim 12 depends from claims 10 and 9 and is there patentable along with those claims.

Dependent claim 14 requires the structural element to comprise the substantially rigid hollow rail or the superstructure frame element of the watercraft. Here again, the references fail to suggest the claimed arrangement.

The Examiner has also rejected claims 25 and 26 under 35 U.S.C. § 103 as unpatentable over Kennedy in view of Elston. According to the Examiner, Kennedy discloses an element 17 capable of withstanding at least 100 psi liquid flowing therein, with at least one internally threaded opening, and a misting nozzle 10 including a shaft having an externally threaded portion threaded directly and operatively into the internally threaded portion.

Even if Kennedy were modified to incorporate an O-ring seal the type shown in 76 in Elston, there is no disclosure or teaching in either reference of an internally threaded opening formed in the liquid tight hollow element, with that element having a land such that the O-ring seal would be operatively disposed between the land and the ledge of the misting nozzle.

Accordingly, no combination of Kennedy and Elston suggest the invention as defined by independent claim 25.


Dependent claim 26 is patentable by reason of its dependence upon claim 25.

For all of the above reasons, it is respectfully submitted that claims 1-30 are in condition for immediate allowance and early passage to issue is requested. Should the Examiner agree, the Examiner is authorized to cancel previously withdrawn claim 31. In addition, should any other small matters remain outstanding, the Examiner is encouraged to telephone the undersigned so that the prosecution of this application can be expeditiously concluded.

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Respectfully submitted,

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